I claim:

1. An electric generation station, comprising:

(A) a solar array including a transfer fluid and operative in response to solar energy to heat said transfer fluid;

(B) a heat exchanger in fluid communication with the transfer fluid and operative to produce steam in response to circulation of heated transfer fluid therethrough;

(C) a first pump operative to circulate the transfer fluid from said solar array through said heat exchanger whereby said heat exchanger produces steam;

(D) an electric generator operative to generate electricity; and

(E) a steam engine in fluid communication with the steam from said heat exchanger and operative in response thereto to operate said electric generator.

2. An electric generation station according to claim 1 wherein said electric generator is mechanically driven by said steam engine.

3. An electric generation station according to claim 4 including a gear box interposed between said electric generator and said steam engine.

4. An electric generation station according to claim 1 including a thermal hot storage medium that can be selectively placed in communication with said solar array and with said heat exchanger, said thermal hot storage operative to accept and store heat from said transfer fluid.

5. An electric generation station according to claim 1 including a thermal fluid reservoir that can be selectively placed in communication with said solar array and with said heat exchanger, said thermal fluid reservoir selectively operable to store said transfer fluid therein.

6. An electric generation station according to claim 1 including a low temperature electric turbine in series fluid communication with said steam engine, said steam engine being located upstream of said low temperature turbine whereby steam is first passed through said steam engine and thereafter through said low temperature electric turbine.

7. An electric generation station according to claim 6 including a condenser in fluid communication with said low temperature electric turbine and said heat exchanger, said condenser being located downstream of said low temperature electric turbine.

8. An electric generation station according to claim 1 wherein said electric generator is a pelton turbine operative to generate electricity in response to a flow of water therethrough and including a pump assembly driven by said steam engine and operative to supply water to said pelton turbine.

9. An electric generation station according to claim 8 wherein said pump assembly is in direct fluid communication with said pelton turbine whereby said pump assembly forces water through said pelton turbine.

10. An electric generation station according to claim 8 including a water supply reservoir associated with said pump assembly and operative to supply water to said pump assembly and receive water from said pelton turbine.

11. An electric generation station according to claim 10 including at least one water storage reservoir located at an elevation above said pelton turbine, said pump assembly operative to pump water from said supply reservoir to said storage reservoir whereby stored water may flow under gravitation force through a water conduit back to said supply reservoir, said pelton turbine being associated with said

water conduit and operative to generate electricity in response to a flow of water therethrough.

12. An electric generation station according to claim 11 wherein said storage reservoir is located at least an elevational distance of about ninety meters above the pelton turbine.

13. An electric generation station according to claim 11 wherein said storage reservoir is located at least an elevational distance of about two hundred seventy meters above the storage reservoir and including a set of pelton turbines associated with said water conduit and each located at different elevations and arranged in series whereby the stored water may flow sequentially through each of the pelton turbines in said set.

14. An electric generation station according to claim 12 wherein the pelton turbines in said set are spaced an elevational distance from one another that is about at least about ninety meters.

15. An electric generation station according to claim 11 including a storage valve controls operative to selectively release water from the storage reservoir.

16. An electric generation station, comprising:

(A) a solar array including a transfer fluid and operative in response to solar energy to heat said transfer fluid;

(B) a heat exchanger in fluid communication with the transfer fluid and operative to produce steam in response to circulation of the heated transfer fluid therethrough;

(C) a first pump operative to circulate heated transfer fluid from said solar array through said heat exchanger whereby said heat exchanger produces steam;

(D) a supply water reservoir;

(E) a storage water reservoir located at an elevation above said supply water reservoir,

(F) a pump assembly operative to pump water from the supply water reservoir to the storage water reservoir;

(G) a steam engine in fluid communication with the steam from said heat exchanger and operative in response thereto

(H) a water conduit in fluid communication with said supply water reservoir and said storage water reservoir and operative to convey water from said storage water reservoir to said supply water reservoir; and

(I) an electric generator associated with said water conduit and operative to generate electricity in response to a flow of water therethrough.

17. An electric generation station according to claim 16 including a thermal hot storage medium that can be selectively placed in communication with said solar array and with said heat exchanger, said thermal hot storage operative to accept and store heat from said transfer fluid.

18. An electric generation station according to claim 16 including a thermal fluid reservoir that can be selectively placed in communication with said solar array and with said heat exchanger, said thermal fluid reservoir selectively operable to store said transfer fluid therein.

19. An electric generation station according to claim 16 including a low temperature turbine generator in series fluid communication with said steam engine, said steam engine being located upstream of said low temperature turbine generator whereby steam is first passed through said steam engine and thereafter through said low temperature turbine generator.

20. An electric generation station according to claim 19 including a condenser in fluid communication with said low temperature electric turbine and said heat exchanger, said condenser being located downstream of said low temperature electric turbine.

21. An electric generation station according to claim 1 wherein said electric generator is a pelton turbine operative to generate electricity in response to a flow of water therethrough.

22. An electric generation station according to claim 16 wherein said storage water reservoir is located at least an elevational distance of about ninety meters above the supply water reservoir turbine.

23. An electric generation station according to claim 16 wherein said storage reservoir is located at least an elevational distance of about two hundred seventy meters above the storage reservoir and including a set of pelton turbines associated with said water conduit and each located at different elevations and arranged in series whereby the stored water may flow sequentially through each of the pelton turbines in said set.

24. An electric generation station according to claim 23 wherein the pelton turbines in said set are spaced an elevational distance from one another that is about at least about ninety meters.

25. An electric generation station according to claim 16 including a storage valve controls operative to selectively release water from the storage reservoir.

26. A method of generating electricity comprising:

(A) heating a thermal transfer fluid by means of a solar array to produce a heated thermal transfer fluid at a first selected temperature;

(B) using said heated thermal transfer fluid to produce steam at a second selected temperature;

(C) using said steam to pump water from a first elevation to a second elevation that is gravitationally higher than said first elevation;

(D) flowing water from the second elevation to the first elevation; and

(E) using the flowing water from step (D) to produce electricity.

27. A method of generating electricity according to claim 26 wherein the first selected temperature is about 730° F.

28. A method of generating electricity according to claim 26 wherein the second selected temperature is about 430° F.

29. A method of generating electricity according to claim 26 wherein said second elevation is at least about ninety meters higher than said first elevation.

30. A method of generating electricity according to claim 26 wherein said second elevation is at least about two hundred seventy meters higher than said first elevation.

31. A method of generating electricity according to claim 30 wherein the step of producing electricity is accomplished by a plurality of electric generators interposed in series in the flowing water.

32. A method of generating electricity according to claim 26 wherein the step of producing electricity is accomplished by an electric generator interposed in the flowing water.

33. A method of generating electricity according to claim 33 wherein the electric generator is a pelton generator.

34. A method of generating electricity according to claim 26 including the step of holding water at the second elevation until the occurrence of a pre-determined event.

35. A method of generating electricity according to claim 34 wherein the pre-determined event is correlated to the spot price for electricity.

36. A method of generating electricity according to claim 26 including the step of selectively storing heat from the heated thermal transfer fluid.

37. A method of generating electricity according to claim 26 including the step of using said steam for the secondary generation of electricity after it has been used to pump water from the first elevation to the second elevation.